

REMARKS

Claims 1 to 17 were pending in the application at the time of final examination. Claims 6 to 10 stand rejected as directed to non-statutory subject matter. Claims 1 to 17 stand rejected as obvious. Claims 1, 2, 3, 6, 7, 8, 11, 12, 13, 14, and 15 have been amended.

Claims 6 to 10 stand rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory matter. The Examiner indicated in the Advisory Action dated April 11, 2006 that the proposed amendment to Claim 6 does not overcome the 101 rejection and suggested replacing the term "embedded" with the term "stored". Applicant has amended Claim 6 in accordance with the suggestion.

Applicant respectfully submits that Claim 6, as amended, obviates the Section 101 rejection of each of Claims 6 to 10. For this reason, Applicant respectfully requests reconsideration and withdrawal of the Section 101 rejection of each of Claims 6 to 10.

Claims 1 to 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,903,890 to Shoji et al. (hereinafter, Shoji) in view of U.S. Patent No. 6,523,028 to DiDomizio et al. (hereinafter, DiDomizio).

Applicant has amended each of Claims 1, 2, 3, 6, 7, 8, 11, 12, 13, 14, and 15 to make explicit that which was implicit at the time of final examination. In particular, data sources are explicitly recited as databases. This distinguishes over data not associated with databases such as the results returned from a search of a database.

Further, Claims 1, 6, and 13 have been amended to explicitly recite that said single access operation is performed for each of said plurality of databases to search for stored data related to said single access operation in each of said plurality of databases. Claim 11 has been amended to explicitly recite that said single query is directed to each of said plurality of databases to search for stored data related

to said single query in each of said plurality of databases. Each of these amendments distinguishes over searching a database for elements not related to stored data, e.g., database attributes.

The foregoing amendments were inherent in the original claim language and are made in an attempt to move prosecution forward and avoid any discussion on whether Applicant is requesting the Examiner to read limitations from the specification into the claims.

Applicant respectfully submits that Claim 1, as amended, overcomes the obviousness rejection.

To establish a *prima facie* case of obviousness, the MPEP directs:

ESTABLISHING A *PRIMA FACIE* CASE OF OBVIOUSNESS

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

MPEP, § 2143, 8th Ed., Rev. 3, p. 2100-135 (August 2005).

Claim 1, as amended, recites:

1. A method for enabling access of a plurality of databases by a single access operation wherein each database in said plurality of databases requires a separate driver to access the database so that there is a plurality of separate drivers, said method comprising:
using an application programming interface (API) for each driver in said plurality of separate drivers, wherein said API is substantially identical for each of said drivers in said plurality of separate drivers;

receiving said single access operation by a merging driver wherein in response to said single access operation, said merging driver accesses each driver in said plurality of separate drivers through said API; and

accessing an associated database in said plurality of databases by said each driver in response to said merging driver access through said API,

wherein said single access operation enabled access of said plurality of databases; and

said single access operation is performed for each of said plurality of databases to search for stored data related to said single access operation in each of said plurality of databases.

The Advisory Action stated:

In response to argument (1), examiner respectfully disagrees because although Shoji have separate queries for each database, **Shoji also discloses combining all the queries with a logic relationships to search all the databases [col.5, lines 45-60]**. The display 770 is associated with the interface driver 720; therefore, the input from the display is sent to the interface driver 720. All the queries are combined and sent to the driver 720 as one query because the driver 720 contains a function that allow an application 726 to specify the databases to be searched and the search criteria [col. 5, lines 39 - 45] (emphasis added).

The cited sections of Shoji actually taught:

FIG. 2B shows an exemplary display 770 optionally associated with interface driver 720. Display 770 contains a plurality of windows (such as windows 772-775), one for displaying information relating to a selected database. Each one of windows 772-775 has a similar structure as display 740 of FIG. 2A, and consequently will not be shown in detail. The user can select search criteria in each window using the methods described above. The result of the search for each database is displayed in the corresponding window. The user can then click on one of the logic relationships shown in a window 778 to select a search for the results of all the databases. A click on a SEARCH window 782 starts the search. The final result is displayed on a result window 780. For example, if the "AND" row in window 778 is selected, window 780 would show the AND of the search results in windows 772-775.

Shoji, col. 5, lines 45 to 60.

Returning now to FIG. 1, an interface driver 720 is used to manage searches on multiple databases. One of the functions of an interface routine 720 is to allow an application 724 to specify the databases to be searched and the search criteria.

FIG. 2B shows an exemplary display 770 optionally associated with interface driver 720.

Shoji, col. 5, lines 39 to 45.

Claim 1, as amended, recites in part that said single access operation is performed for each of said plurality of databases. The Advisory Action stated, "Shoji also discloses combining all the queries with a logic relationships to search all the databases [col.5, lines 45-60]."

From the foregoing, it appears that the Examiner interpreted Shoji's combining all the queries with a logic relationship to search all the databases as teaching the single access operation is performed for each of said plurality of databases, as recited in amended Claim 1.

Assuming arguendo that Shoji's combining all the queries with a logic relationship to search all the databases can be equated with teaching said single access operation is performed for each of said plurality of databases, as recited in amended Claim 1, Applicant respectfully notes that the cited section of Shoji taught nothing about said single access operation is performed for each of said plurality of databases.

Instead, the cited sections of Shoji explicitly taught that "[t]he user can then click on one of the logic relationships shown in a window 778 to select a search for the results of all the databases." Thus, the cited section of Shoji taught that a user selects a search for the results of the database, i.e., the user-selected search is directed to the results returned from a search of the databases, and is not a search of the databases themselves. Thus, the user-selected search of Shoji differs from said single access operation is performed for each of said plurality of databases to search for

stored data related to said single access operation in each of said plurality of databases, as recited in amended Claim 1.

Shoji provided at least two examples of searching the results returned from individual searches of databases. In one example, Shoji taught:

Typically, an application needs to perform a search on more than one databases. For example, the application may like to search for all books published by a certain publisher between 1960 and 1970. This search would involve (i) a search on a database associating the ID with the publishers and (ii) a search on a database associating the ID with the years of publication. The results of the two searches are then "ANDed" together (emphasis added).

Shoji, col. 5, lines 31 to 38. Thus, Shoji taught the use of two separate searches on two separate databases using two separate queries, i.e., "(i) a search on a database associating the ID with the publishers and (ii) a search on a database associating the ID with the years of publication." This did not teach using a single access operation to search the databases. Rather, this explicitly taught away by teaching that individual search criteria are used for searching each database.

In this same example, Shoji also taught, "The results of the two searches are then 'ANDed' together." This, too, failed to teach using a single access operation to search the databases, and instead taught about performing an AND operation on the results returned from the two database searches.

In another example, Shoji taught:

The user can select search criteria in each window using the methods described above. The result of the search for each database is displayed in the corresponding window. The user can then click on one of the logic relationships shown in a window 778 to select a search for the results of all the databases. A click on a SEARCH window 782 starts the search. The final result is displayed on a result window 780. For example, if the "AND" row in window 778 is selected, window 780 would show

the AND of the search results in windows 772-775 (emphasis added).

Shoji, col. 5, lines 50 to 60. Thus, Shoji taught, "The user can select search criteria in each window using the methods described above." This means that separate search criteria are selected for each window, and separate searches of databases associated with a particular window are conducted where each search is based on the separate search criteria selected in a respective window associated with a particular database. This, too, taught nothing about said single access operation is performed for each of said plurality of databases to search for stored data related to said single access operation in each of said plurality of databases, as recited in amended Claim 1. In fact, Shoji taught away from use of a single access operation by teaching that the user can select search criteria in each window, i.e., separate queries for each database search.

Shoji went on in the same example to teach, "The user can then click on one of the logic relationships shown in a window 778 to select a search for the results of all the databases" and that "[a] click on a SEARCH window 782 starts the search. The final result is displayed on a result window 780." Thus, Shoji explicitly taught that the user clicks on one of the logic relationships to select a search of the results returned from individual searches of the databases. This, too, taught nothing about said single access operation is performed for each of said plurality of databases to search for stored data related to said single access operation in each of said plurality of databases, as recited in amended Claim 1.

Shoji went on to exemplify a search of the results returned from separate searches based on individual search criteria selected for each of multiple databases by teaching, "For example, if the "AND" row in window 778 is selected, window 780 would show the AND of the search results in windows 772-775." This clearly demonstrated that the results returned from separate searches of databases are displayed in respective

windows 772 to 775 and the logic operator "AND" is applied to those results, not to the databases.

From the foregoing, it is clear that Shoji taught (1) searching multiple databases using an individual query for each database; and (2) applying a logic relationship to search the results returned from individual searches based on individual queries of respective databases. The Examiner failed to show that the cited references, alone or in combination, taught each of the claim limitations of amended Claim 1. This alone is sufficient to overcome the obviousness rejection of amended Claim 1.

The Advisory Action further stated:

As to argument (2), examiner respectfully disagrees and submits that DiDomizio does not disclose searching an index file and accessing a LDAP structure is not the same as searching an index file.

On this point, the Office Action dated January 24, 2006 stated:

...accessing an associated data source in said plurality of data sources by said each driver in response to said merging driver access through said API [step 128 of **searching the database structure (e.g., LDAP structure) to retrieve all attributes in the target databases that match the terms of the enhanced query selected by the user; col. 9, lines 57 - col. 10, line 23**] (emphasis added).

The cited section of DiDomizio taught:

In another aspect, the present invention is directed to a method for querying distributed databases. Generally, and referring to FIGS. 8A-8B, in this embodiment, the method of present invention includes a step 112 of receiving from a user a query (e.g., structured query or unstructured query). Thereafter, the method includes a step 116 of identifying/extracting nouns, noun phrases, verbs and/or data from the query. Thereafter, the methodology includes a step 120 of sending to the user the enhanced query, at which point the user may select terms which will be searched for any attribute names of the target databases. Users are also afforded the opportunity to enter new queries. In this regard, in the event a new query is received from the user, the new query may be

received and then processed as described herein-above. Otherwise, the method includes the step 124 of receiving the selected terms of the enhanced query from the user. Thereafter, the method includes the step 128 of searching the database structure (e.g., LDAP structure) to retrieve all attributes in the target databases that match the terms of the enhanced query selected by the user. The method then includes the step of retrieving the rest of the attributes for the tables that had matching attribute names and the step 132 of sending to the user matching tables in the distributed databases. At this point, the method of the present invention allows the user to create a pictorial query and to add constraints. In this regard, the method includes the step 136 of receiving selected tables from the user corresponding to the table from which the user wishes data to be retrieved from the system databases. Upon receipt of such selected tables from the user, the method includes the step 140 of generating an SQL code and the step 144 of retrieving data from the appropriate target databases and the step 148 of sending the retrieved data to the user (emphasis added).

DiDomizio, col. 9, lines 57 to 67; col. 10, lines 1 to 23. Thus, the DiDomizio method receives the terms of the enhanced query, i.e., the attributes, and the search retrieves all attributes in the target databases that match the terms of the enhanced query selected by the user.

Applicant respectfully notes that one skilled in the art will recognize that an attribute of a database generally describes something about the database, such as a table name, and does NOT refer to the actual content of a database, i.e., stored data. Thus, DiDomizio's search for and retrieval of attributes taught nothing about said single access operation is performed for each of said plurality of databases to search for stored data related to said single access operation in each of said plurality of databases, as recited in amended Claim 1. Therefore, the Examiner failed to show that the cited references, alone or in combination, taught each of the claim limitations of amended Claim 1. This, too, is sufficient to overcome the obviousness rejection of Claim 1.

Further, DiDomizio explicitly taught, "The method includes the step 140 of generating an SQL code and the step 144 of retrieving data from the appropriate target databases and the

step 148 of sending the retrieved data to the user.", as quoted above.

Assuming arguendo that DiDomizio's SQL code can be equated with a single access operation, as recited in amended Claim 1, DiDomizio's method of generating an SQL code taught away from the present invention's method of receiving said single access operation by a merging driver, as recited in amended Claim 1, wherein the single access operation exists independently of, i.e., is not generated by, the method of amended Claim 1. (Please refer to the preamble of amended Claim 1). This, too, is sufficient to overcome the obviousness rejection of Claim 1.

For each of the foregoing reasons, amended Claim 1 overcomes the obviousness rejection. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of Claim 1.

Claims 2 to 5 depend directly or indirectly from Claim 1 and therefore distinguish over the cited art for at least the same reasons as Claim 1. Applicant respectfully requests reconsideration and withdrawal of each of the obviousness rejections of Claims 2 to 5.

Applicant respectfully submits that each of amended Claims 6 and 13 overcome the obviousness rejection. Claims 6 and 13 were rejected for the same reasons as Claim 1. Therefore, as discussed with respect to amended Claim 1, and incorporated herein by reference, the Office Action failed to show how the cited references, alone or in combination, taught or suggested all of the claim limitations of amended Claims 6 and 13. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejections of each of Claims 6 and 13.

Claims 7 to 10 and Claims 14 to 17 depend directly or indirectly from amended Claims 6 and 13, respectively, and therefore distinguish over the cited art for at least the same reasons as amended Claims 6 and 13. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection each of Claims 7 to 10 and each of Claims 14 to 17.

Applicant respectfully submits that Claim 11, as amended, overcomes the obviousness rejection.

Claim 11, as amended, recites:

11. A system comprising:
a plurality of databases;
a driver for each database in said plurality of databases thereby forming a plurality of drivers wherein each driver has a substantially identical driver application programming interface; and
a merging driver coupled to each driver in said plurality of drivers through said driver application programming interface wherein said merging driver distributes a single query to each driver in said plurality of drivers so that said single query is directed to each of said plurality of databases to search for stored data related to said single query in each of said plurality of databases.

As discussed above with respect to amended Claim 1 and incorporated herein by reference, the Office Action failed to show that the cited sections of the references, alone or in combination, taught or suggested all of the claim limitations of Claim 11, as amended.

For example, the cited sections of Shoji failed to teach said merging driver distributes a single query to each driver in said plurality of drivers so that said single query is directed to each of said plurality of databases to search for stored data related to said single query in each of said plurality of databases, as recited in amended Claim 11. Instead, the cited sections of Shoji taught away with its teaching that the user can select search criteria in each window, i.e., separate queries, for each database search.

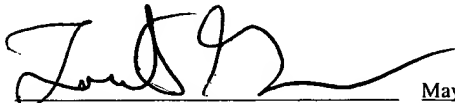
In another example, the cited sections of DiDomizio taught nothing about said merging driver distributes a single query to each driver in said plurality of drivers so that said single query is directed to each of said plurality of databases to search for stored data related to said single query in each of said plurality of databases, as recited in amended Claim 11.

Claim 12 depends from amended Claim 11 and so distinguishes over the prior art references for at least the same reasons as amended Claim 11. Applicant respectfully requests reconsideration and withdrawal of the obviousness rejection of Claim 12.

Claims 1 to 17 remain in the application. Claims 1, 2, 3, 6, 7, 8, 11, 12, 13, 14, and 15 have been amended. For the foregoing reasons, Applicant respectfully requests allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant.

CERTIFICATE OF MAILING

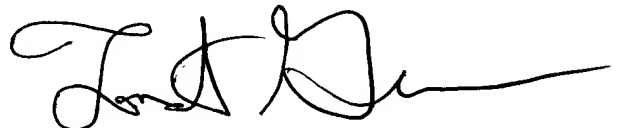
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 19, 2006.



Attorney for Applicant(s)

May 19, 2006
Date of Signature

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